CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Sacramento, California 95814
Main website: www.energy.ca.gov

In the matter of:

2013 Building Energy Efficiency Standards,   )   Docket No. 12-BSTD-01
California Code of Regulations, Title 24,   )   Order No. 14-1210-07
Parts 1 and 6   )

ORDER TO APPROVE AN ALTERNATIVE PROTOCOL AND TO APPROVE ENERGY PRO VERSION 6.2 NONRESIDENTIAL COMPLIANCE SOFTWARE THROUGH 5:00 PM ON MARCH 31, 2015

In this order, the California Energy Commission adopts the Executive Director's Recommendation, attached as Exhibit A, and approves:

1. An alternative protocol that the Energy Commission may use to conditionally approve nonresidential vendor software (also known as an Alternative Calculation Method) that does not integrate the Public Domain Compliance Manager but meets specific time dependent valuation (TDV) requirements, that building permit applicants may conditionally use until 5:00 PM on March 31, 2015 to demonstrate compliance with the performance approach (i.e. using energy budgets)of the nonresidential provisions of the 2013 Building Energy Efficiency Standards, California Code of Regulations, Title 24, Part 6, and associated administrative regulations in Part 1, Chapter 10 (Standards); and

2. Energy Pro Version 6.2 for nonresidential buildings, by Energy Soft, as 2013 nonresidential compliance software pursuant to the above alternative protocol that building permit applicants may use conditionally until 5:00 PM on March 31, 2015 to demonstrate compliance with the Standards.

WHEREAS, pursuant to section 10-109 (h) of the Standards, in addition to the procedures and protocols identified in the Alternative Calculation Method Approval Manuals and the Reference Appendices, the Commission may authorize alternative procedures and protocols that demonstrate compliance with Part 6;

WHEREAS, the Executive Director recommends Alternative Calculation Methods that do not integrate the California Building Energy Code Compliance Nonresidential (CBECC-Com) Application Program Interface (API) Compliance Manager but still meet specific TDV requirements, specified in Exhibit A attached hereto, to be conditionally approved through 5:00 PM on March 31, 2015 as compliance software valid for demonstrating compliance with the Standards;

WHEREAS, the Executive Director has reviewed EnergySoft's application for EnergyPro Version 6.2 to be an Alternative Calculation Method and has tested EnergyPro Version 6.2 to ensure it meets the alternate procedure or protocol attached as Exhibit A, to be conditionally approved through 5:00 PM on March 31, 2015;

WHEREAS the Executive Director recommends EnergyPro Version 6.2 be conditionally approved until 5:00 PM on March 31, 2015 as an Alternative Calculation Method to demonstrate compliance with the nonresidential provisions of the Standards;

WHEREAS, pursuant to section 25218.5 of the Public Resources Code, the provisions specifying any power or duty of the commission shall be liberally construed, in order to carry out the objectives of Public Resources Code section 25000 et seq. (Warren-Alquist Act);

WHEREAS, pursuant to section 25218, subdivision (e) of the Public Resources Code, in addition to the powers specified in Warren-Alquist Act, the commission may take any reasonable action necessary to carry out the Warren-Alquist Act;

THEREFORE, the Commission confirms the Executive Director's findings and adopts his Recommendation to approve the alternative procedure or protocol in the Executive Director's Recommendation, in Exhibit A, that Alternative Calculation Methods which do not integrate the public domain Compliance Manager, but still meet specific TDV requirements, be conditionally approved through 5:00 PM on March 31, 2015;

THEREFORE, the Commission conditionally approves EnergyPro Nonresidential Version 6.2 software, pursuant to the alternative procedure or protocol, as an Alternative Calculation Method that building permit applicants may conditionally use until 5:00 PM on March 31, 2015 to demonstrate compliance with the nonresidential provisions of the Standards.

IT IS SO ORDERED.

CERTIFICATION

The undersigned Secretary to the Commission does hereby certify that the foregoing is a full, true and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on December 10, 2014.

AYE: Douglas, McAllister, Hochschild, Scott
NAY: None
ABSENT: Weisenmiller
ABSTAIN: None

HARRIET KALIEMEYN
Secretariat

STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

2013 Building Energy Efficiency Standards, California Code of Regulations, Title 24, Parts 1 and 6	Docket No. 12-BSTD-01

RECOMMENDATION BY THE EXECUTIVE DIRECTOR TO THE ENERGY COMMISSION TO CONDITIONALLY APPROVE ENERGYPRO VERSION 6.2 COMPLIANCE SOFTWARE

The Executive Director of the California Energy Commission recommends that the Energy Commission approve (1) the alternative protocol for the Commission to conditionally approve, until March 31, 2015, nonresidental vendor software that does not integrate the Public Domain Compliance Manager but meets specific time dependent valuation (TDV) requirements, and (2) pursuant to the alternative protocol, approve EnergyPro Version 6.2 as an alternative calculation method for demonstrating compliance with the performance approach of the nonresidential provisions of the 2013 Building Energy Efficiency Standards, California Code of Regulations, Title 24, Part 6, and associated administrative regulations in Part 1, Chapter 10 (Standards).

The Warren-Alquist State Energy Resources Conservation and Development Act, Public Resources Code sections 25000 et seq., 25402.1, subd. (b), requires the Energy Commission to, among other things, establish a process for certifying calculation methods for demonstrating compliance with its building energy efficiency standards.

Section 10-109(c)(2) of the Standards authorizes the Commission to approve non-public domain computer programs as an alternative calculation method that building permit applicants may then use to demonstrate compliance with the Standards.

Pursuant to section 10-109(c)(2), the Alternative Calculation Methods must include documentation demonstrating the nonresidential software meets the requirements, specifications, and criteria in the Nonresidential Approval Manual. The Nonresidential Approval Manual requires Alternative Calculation Method software to incorporate the Compliance Manager from the nonresidential public domain compliance software. California Building Energy Code Compliance Nonresidential (CBECC-Com) is the nonresidential public domain compliance software approved by the Commission and contains the Compliance Manager that Nonresidential Alternative Calculation Methods are required to incorporate. The Compliance Manager contains an element known as the CBECC-Com Application Program Interface (API).

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Pursuant to section 10-109 (h) of the Standards, in addition to the procedures and protocols identified in the Alternative Calculation Method Approval Manuals and the Reference Appendices, the Commission may authorize alternative procedures and protocols that demonstrate compliance with Part 6.

Until 5:00 PM March 31, 2015, The Executive Director recommends the following alternative protocol to conditionally approve nonresidential Alternative Calculation Methods that do not integrate the CBECC-Com API.

This alternate protocol is necessary because it provides EnergyPro the additional time necessary to finish incorporating the CBECC-com API. It allows the Commission time to implement the revised Certificate of Performance (PERF-1) which will standardize compliance documents for all nonresidential software products which will help building departments perform their plan reviews. This will give Commission staff and industry additional time to perform testing on the CBECC-com API. It allows energy modeling industry additional time to enroll in the training opportunities available to them.

1. The alternate protocol for the Commission to conditionally approve, until 5:00 PM March 31, 2015, nonresidental vendor software that does not integrate the Public Domain Compliance Manager but meets specific time dependent valuation (TDV) requirements

This alternative protocol only applies to the Energy Commission staff's review of an application submitted pursuant to 10-110, that Energy Commission staff must determine is complete with all of the supporting documents pursuant to section 10-109, to approve a Nonresidential Alternative Calculation Method that does not integrate the CBECC-Com API. The application for Nonresidential Alternative Calculation Method shall be evaluated in all other ways as required by law except for the sections that require the ACM to incorporate the API. The sections of the Nonresidential Alternative Calculation Method Reference Manual that an Alternative Calculation Method, approved pursuant to this alternative protocol, is not meeting are: Section 3.3 ASHRAE Standard 140-2007 Tests and Section 3.5 Software Sensitivity Tests. The ACM must also meet the following testing criteria to demonstrate compliance:

> Applicant software must meet the criteria for both the baseline TDV energy comparison and the TDV energy variation tests.
>
> *Baseline TDV energy comparison tests:* For each test case, the baseline TDV energy result output of the proposed alternative calculation method provided by the applicant is compared to a benchmark for a set of standardized building models and must be within ±15% of the baseline TDV energy of Reference Method results. The standard benchmark for a set of standardized building models can be found as "Attachment A" to this document.

TDV energy comparison tests: For each test case, the change in energy must be in the same direction as the Reference Method test case result, and must be equal to the Reference Method test case percentage change in TDV energy, plus or minus 1% of baseline TDV energy.

This protocol may be used until 5:00 PM March 31, 2015, to approve any Alternative Calculation Method that may be used to demonstrate compliance, until 5:00 PM March 31, 2015, with the performance approach of the nonresidential provisions of the Standards.

2. <u>Pursuant to the alternative protocol, the Executive Director recommends approval of EnergyPro Version 6.2 as an alternative calculation method for demonstrating performance compliance with the nonresidential provisions of the Standards.</u>

As allowed by the 2013 Standards, an application has been submitted to approve EnergyPro Version 6.2 as an alternative calculation method for demonstrating compliance with the performance approach of the nonresidential provisions of the Standards.

Staff of the Energy Commission has reviewed the application. Staff of the Energy Commission has tested EnergyPro Version 6.2 pursuant to the alternative protocol specified above to conditionally approve, until 5:00 PM March 31, 2015, nonresidental vendor software that does not integrate the Public Domain Compliance Manager but meets specific TDV requirements.

Staff of the Energy Commission has also reviewed the application and tested EnergyPro Version 6.2 to ensure it meets all other requirements, specifications, and criteria, other than the requirements to incorporate the API, set forth in the Nonresidential Alternative Calculation Method Approval Manual, as required by Section 10-109 of the Standards.

Pursuant to Section 10-110 of the Standards, the Executive Director of the California Energy Commission has determined that the application is complete with all of the supporting information required in Section 10-109 of the Standards, and pursuant to the alternative protocol specified above, recommends the California Energy Commission conditionally approve EnergyPro Version 6.2 until 5:00 PM March 31, 2015 as an alternative calculation method for demonstrating compliance with the performance approach of the nonresidential provisions of the 2013 Standards.

Pursuant to subsection (e) of Section 10-110 of the Standards, the complete application package, any additional information considered by the Executive Director, and this Recommendation shall be considered at the December 10, 2014 meeting, which is the next business meeting after the submission of this Recommendation.